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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/241,450	02/02/1999	JOHN O. RUID	1-8380	8758

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EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

28

Office Action Summary	Application No. 09/241,450	Applicant(s) RUID ET AL.	
	Examiner Ula C Ruddock	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-9 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-9, 29-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner has carefully considered Applicant's response filed October 18, 2004.

Claim Objections

2. Claims 30-35 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 30, which includes closed language (i.e. consisting of), is dependent upon claim 1, which includes open language (comprising).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 30-32 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 is written with "consists of" language. However, claims 31, 32, and 34 all add additional components to the composite. Claims that depend upon a claim that has closed language cannot add new structural limitations.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1771

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 and 29-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Horner, Jr. et al. (US 2003/0032351). Horner, Jr. et al. disclose a facer suitable for use in insulation boards (abstract). The facer comprises fibrous mats (i.e. nonwoven) made of glass fibers [0017 and 0018]. The fibrous mat is coated with an acrylic based resin [0021] having a thickness of from about 1-100 mils [0022]. Preferably, the coating mixture does not penetrate through the mat [0024]. With regard to Applicant's limitation of a "roughly textured face," it is the Examiner's position that resin bonded glass fibers inherently have a rough surface. Therefore, because the fibrous mat of Horner, Jr. et al. contains a resin binder [0018], it would have a rough surface. The resulting facer product is flexible and possesses low permeability to liquid chemicals used for insulation cores as well as superior dimensional stability and high tensile strength after curing [0023]. A second fibrous surface is positioned above the first fibrous mat [0034].

Horner, Jr. et al. disclose the claimed invention except for the teaching of Applicant's entire process of making the insulation. Horner, Jr. et al. disclose the claimed invention except for the teaching that the thickness dimension of the cover layer has a variation of at most 1 mm, that the cover layer extends into the body layer to a distance from the roughly textured face at most about 95% of the thickness dimension, that the second web is a nonwoven having a thickness in the range of about 0.062-0.25 inch, and that the body layer has a density of about 1 pound per foot³.

Horner, Jr. et al. also fail to clearly disclose that the cover layer has a thickness dimension

which is substantially uniform and in which the cover layer is permanently embedded into the body layer from the roughly textured face to a depth less than the thickness dimension.

It is not seen how Applicant's method of making the insulation composite significantly affects the chemistry or structure of the insulation composite itself. It is the examiner's position that the insulation material of Horner, Jr. et al. is identical to or only slightly different than the claimed insulation composite prepared by the method of the claims, because both insulation material comprises a first and second nonwoven fiberglass layer and a cured acrylic coating having a thickness of 1 millimeter. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). The Horner, Jr. et al. reference either anticipates or strongly suggests the claimed subject matter. In the event any difference can be shown for the insulation material of the product-by process of claims 29 and 38, as opposed to the product taught by the Horner, Jr. et al. reference, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results.

It should be noted that optimizing the coating thickness variation, the percentage of coating in the nonwoven mat, the thickness of the nonwoven web, and the density of the body layer are

result effective variables. For example, the smaller the coating thickness variation greatly enhances the aesthetic value of the insulation board and decreases the chance of delamination. Furthermore, the greater the thickness of the nonwoven directly affects the strength of the entire composite. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a cover layer having a thickness dimension variation of at most 1 mm, a cover layer that extends into the body layer to a distance from the roughly textured face at most about 95% of the thickness dimension, a nonwoven web having a thickness in the range of about 0.062-0.25 inch, and a body layer having a density of about 1 pound per foot³, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have optimized these claimed measurements motivated by the desire to obtain an insulating composite that has enhanced aesthetics, decreased delamination, and increased strength and durability.

With regard to Applicant's disclosure of a "nonwoven of wet laid glass fiber," it has been held that the method of forming a product is not germane to the issue of patentability of the product itself. Therefore, this limitation has not been given any patentable weight.

With regard to Applicant's limitation that the cover layer has a thickness which is substantially uniform and in which the cover layer is permanently embedded into the body layer from the roughly textured face to a depth less than the thickness dimension, it is the Examiner's position that it would have been obvious to one having ordinary skill in the art to have made the thickness of the cover layer be substantially uniform and to have

permanently embedded the cover layer into the body layer to a depth less than the thickness dimension, motivated by the desire to create an insulating composite that has increased lamination strength.

Response to Arguments

6. Applicant's arguments with respect to claims 1-9 and 29-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UCR

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